

FIG. 1

1008543-030402

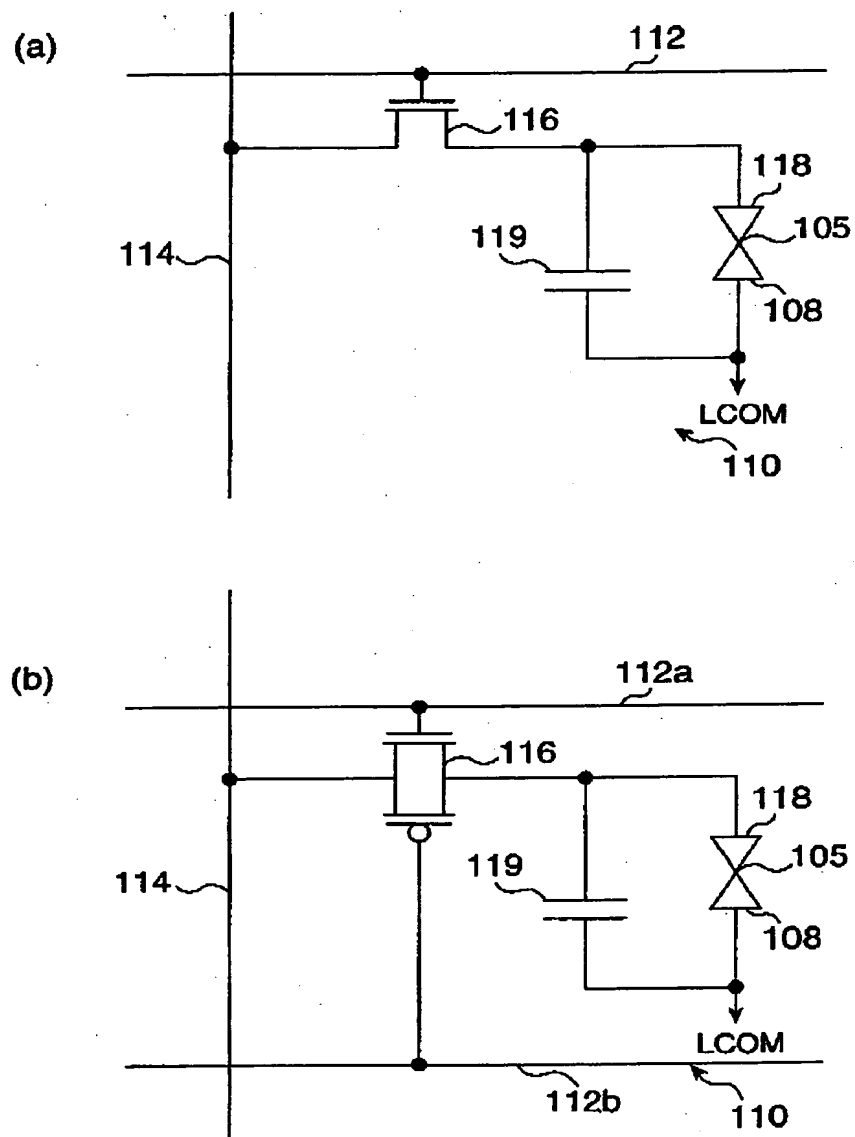


FIG. 2

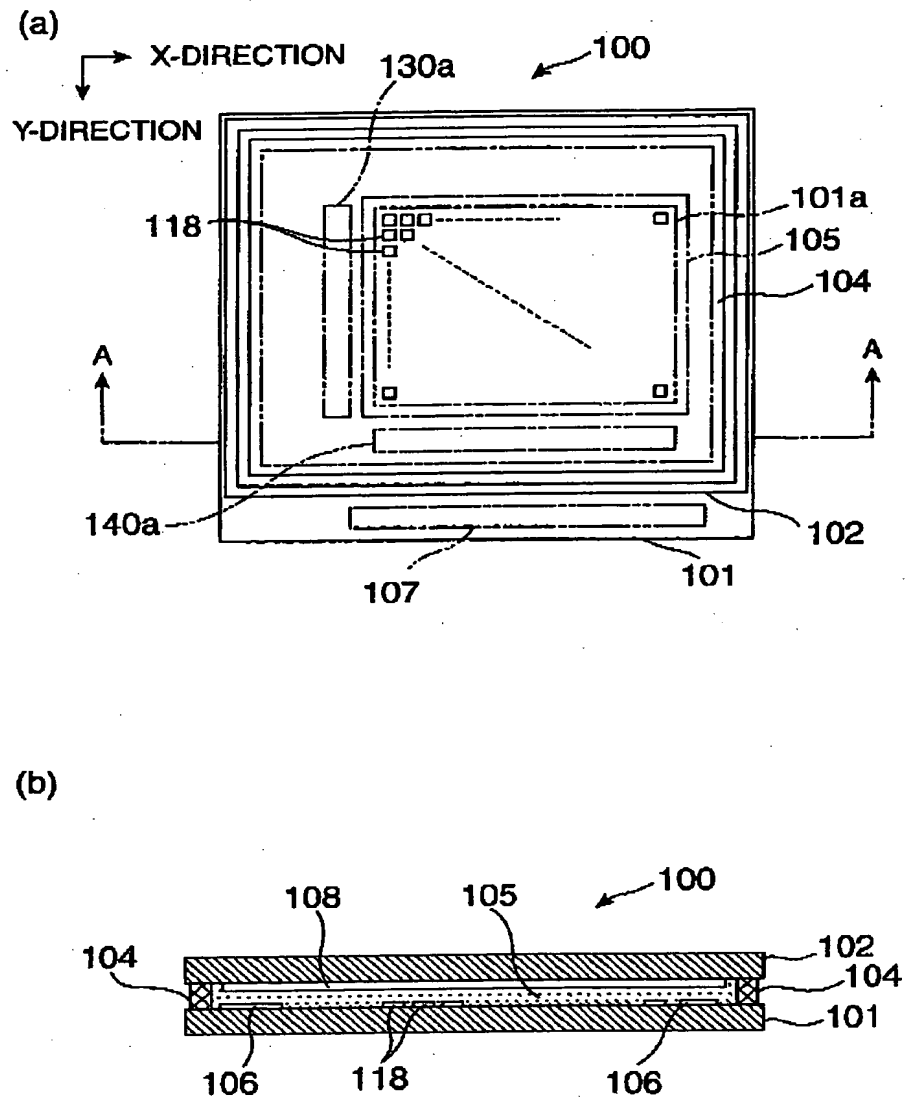


FIG. 3

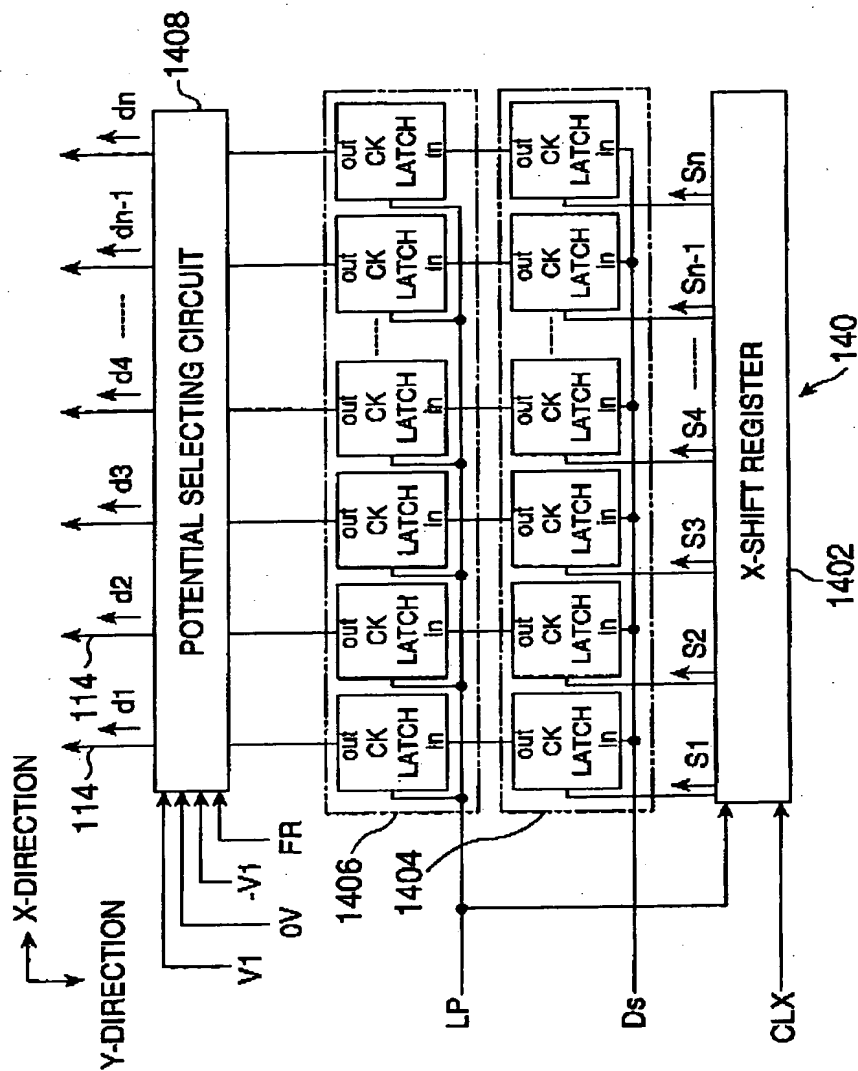


FIG. 4

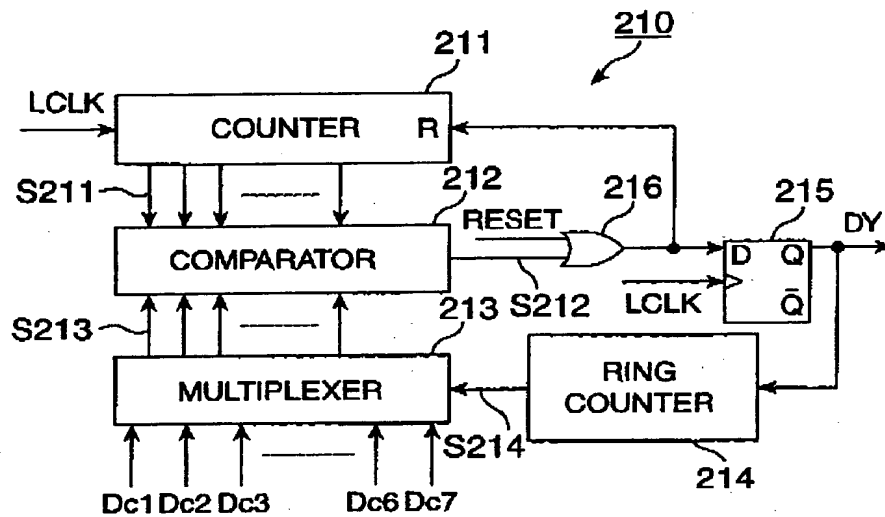


FIG. 5

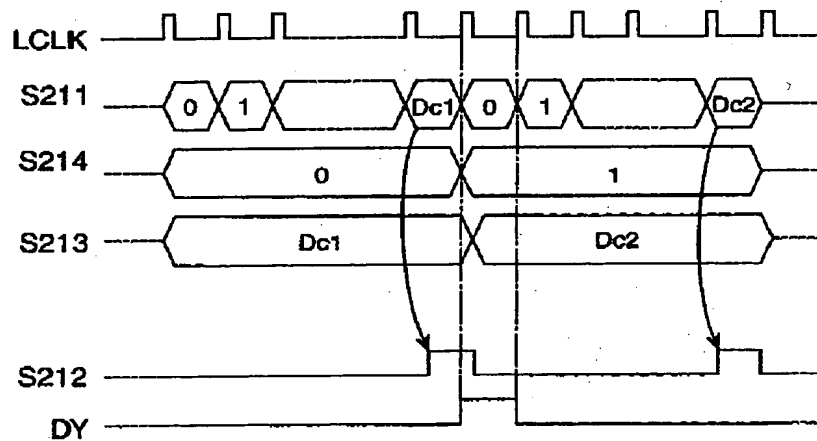


FIG. 6

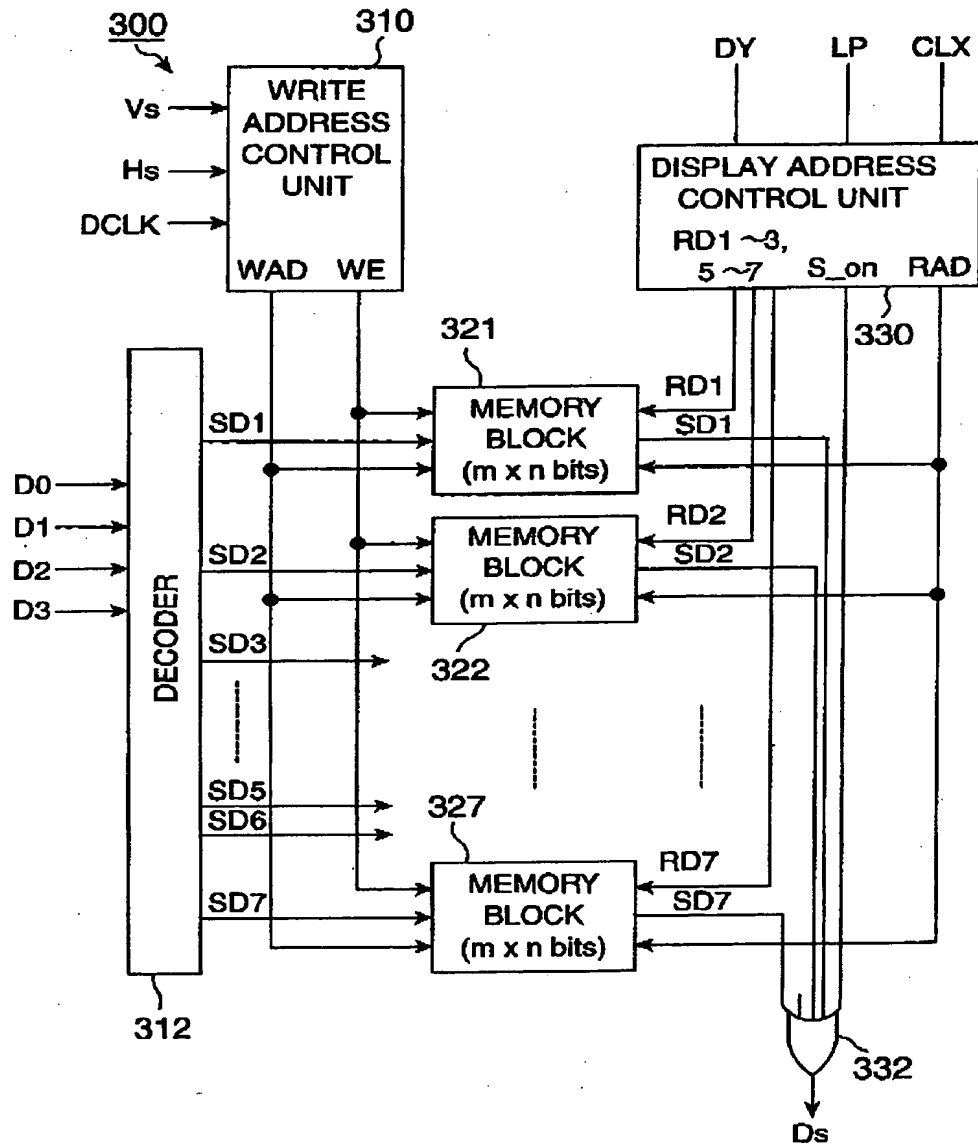


FIG. 7

10086543-030402

TRUTH TABLE FOR DECODER IN DATA CONVERTING CIRCUIT  
(16 LEVELS 7sf)

	DATA	SD1	SD2	SD3	SD5	SD6	SD7
0	0000	0	0	0	0	0	0
1	0001	0	0	1	0	0	0
2	0010	0	1	1	0	0	0
3	0011	1	1	1	0	0	0
4	0100	0	0	0	1	0	0
5	0101	0	0	1	1	0	0
6	0110	0	1	1	1	0	0
7	0111	1	1	1	1	0	0
8	1000	0	0	0	1	1	0
9	1001	0	0	1	1	1	0
10	1010	0	1	1	1	1	0
11	1011	1	1	1	1	1	0
12	1100	0	0	0	1	1	1
13	1101	0	0	1	1	1	1
14	1110	0	1	1	1	1	1
15	1111	1	1	1	1	1	1

FIG. 8

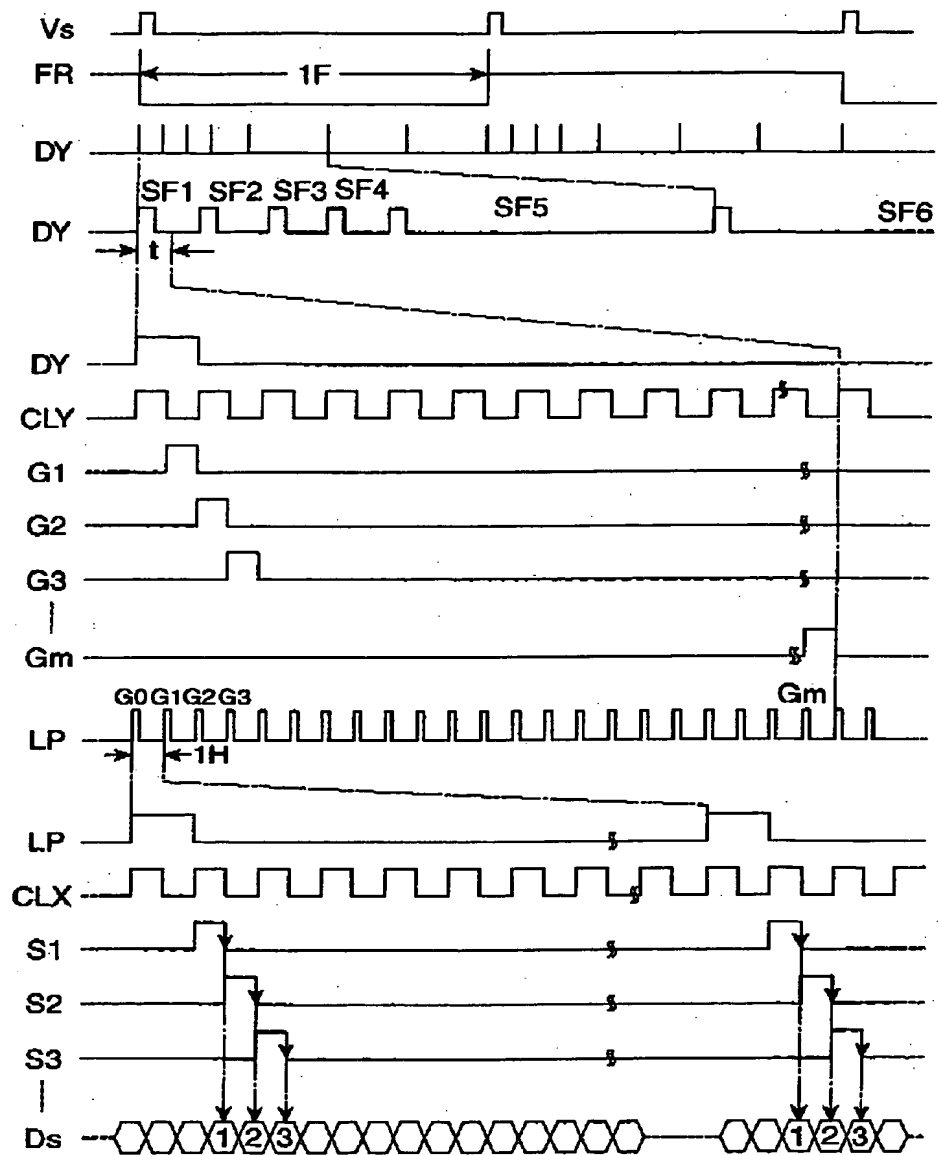


FIG. 9



LEVEL OF GRAYSCALE 0  
(0000)  
LEVEL OF GRAYSCALE 1  
(0001)  
LEVEL OF GRAYSCALE 2  
(0010)  
LEVEL OF GRAYSCALE 3  
(0011)  
LEVEL OF GRAYSCALE 4  
(0100)  
LEVEL OF GRAYSCALE 5  
(0101)  
LEVEL OF GRAYSCALE 6  
(0110)  
LEVEL OF GRAYSCALE 7  
(0111)  
LEVEL OF GRAYSCALE 8  
(1000)  
LEVEL OF GRAYSCALE 9  
(1001)  
LEVEL OF GRAYSCALE 10  
(1010)  
LEVEL OF GRAYSCALE 11  
(1011)  
LEVEL OF GRAYSCALE 12  
(1100)  
LEVEL OF GRAYSCALE 13  
(1101)  
LEVEL OF GRAYSCALE 14  
(1110)  
LEVEL OF GRAYSCALE 15  
(1111)

FIG. 10

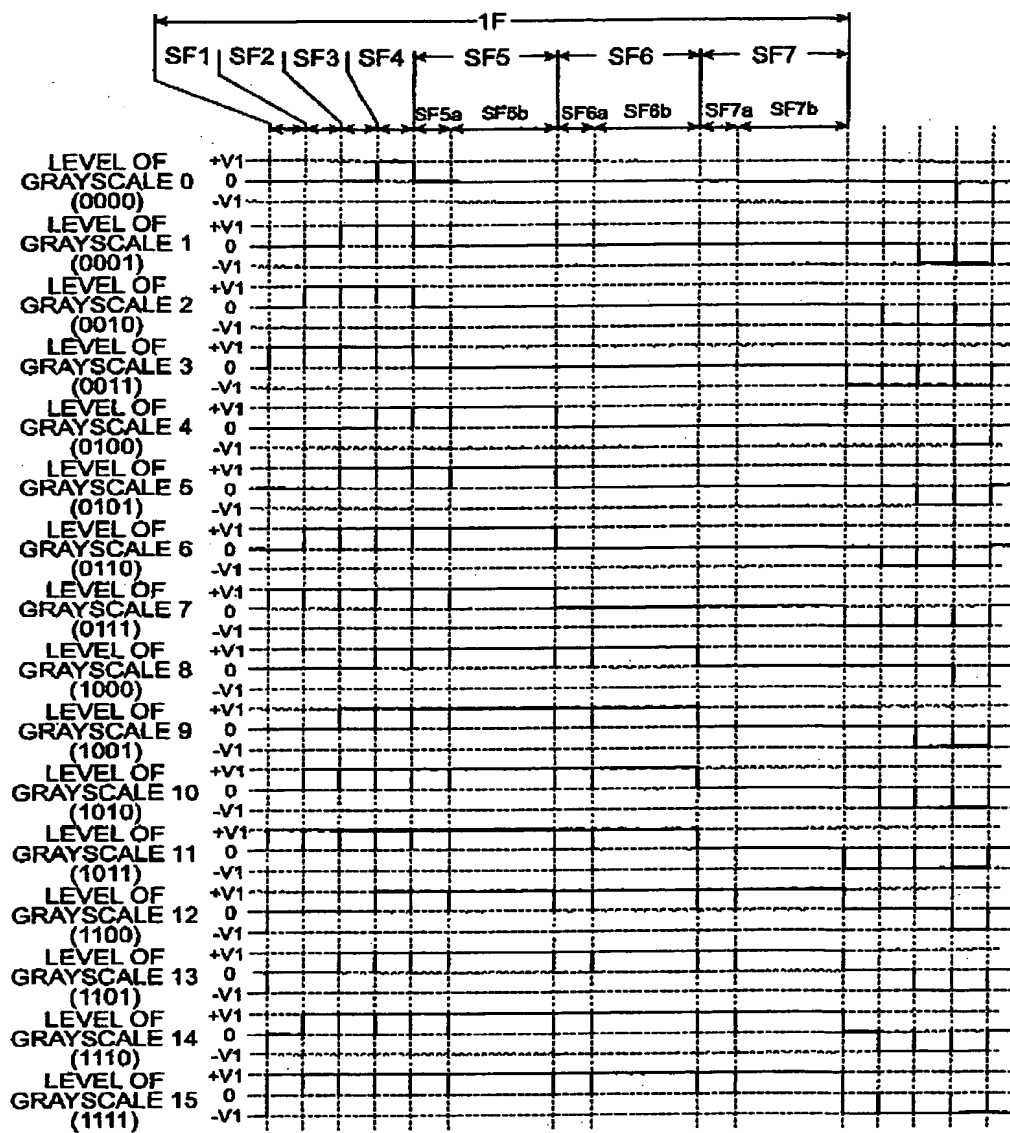


FIG. 11

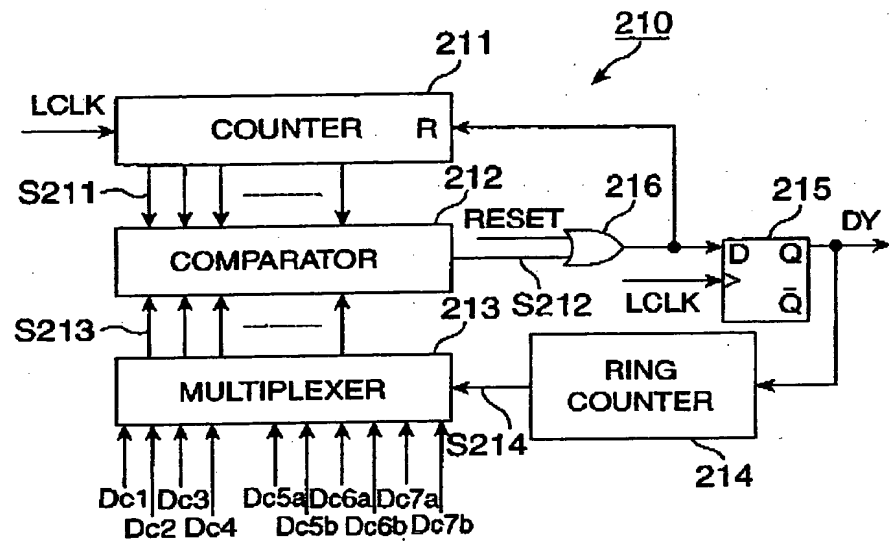
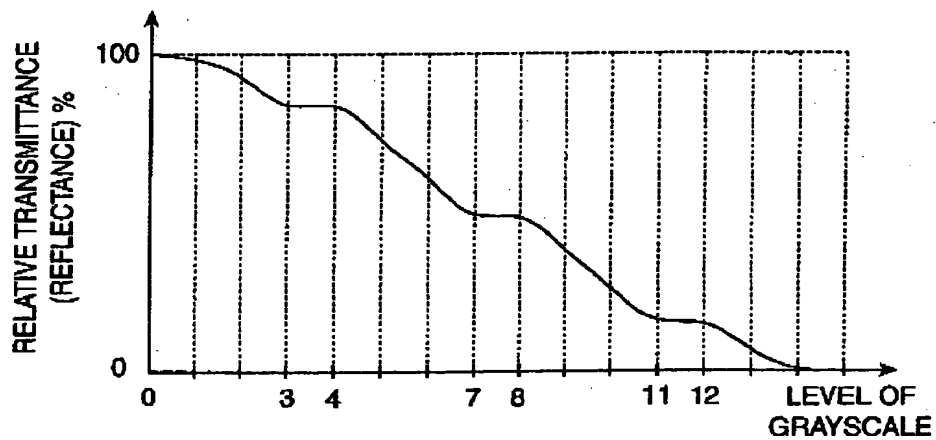


FIG. 12

(a)



(b)

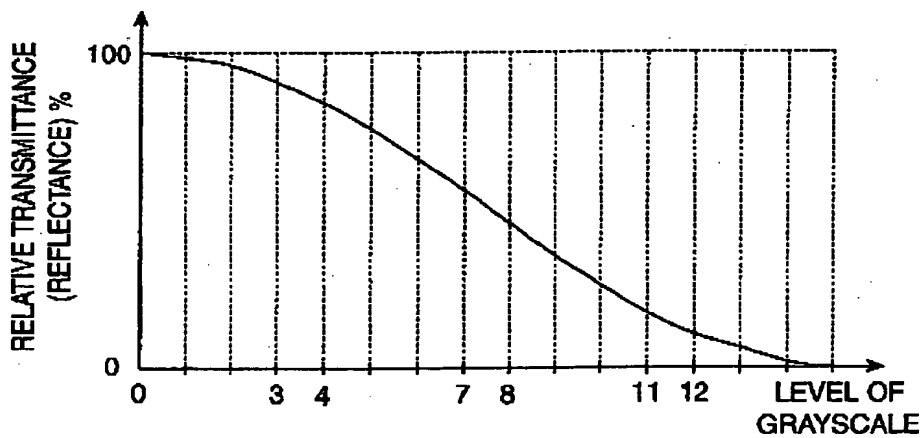


FIG. 13

204050" CH59800T 10086543 030402

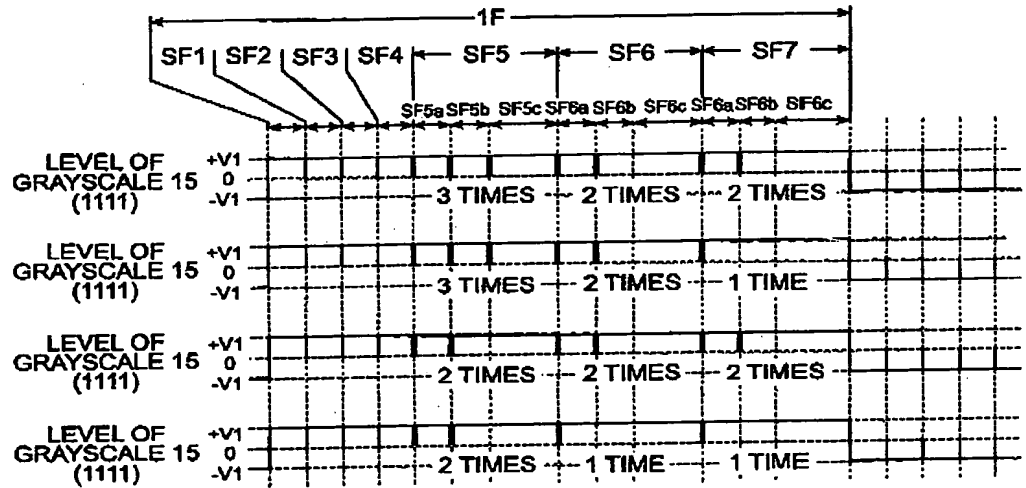


FIG. 14



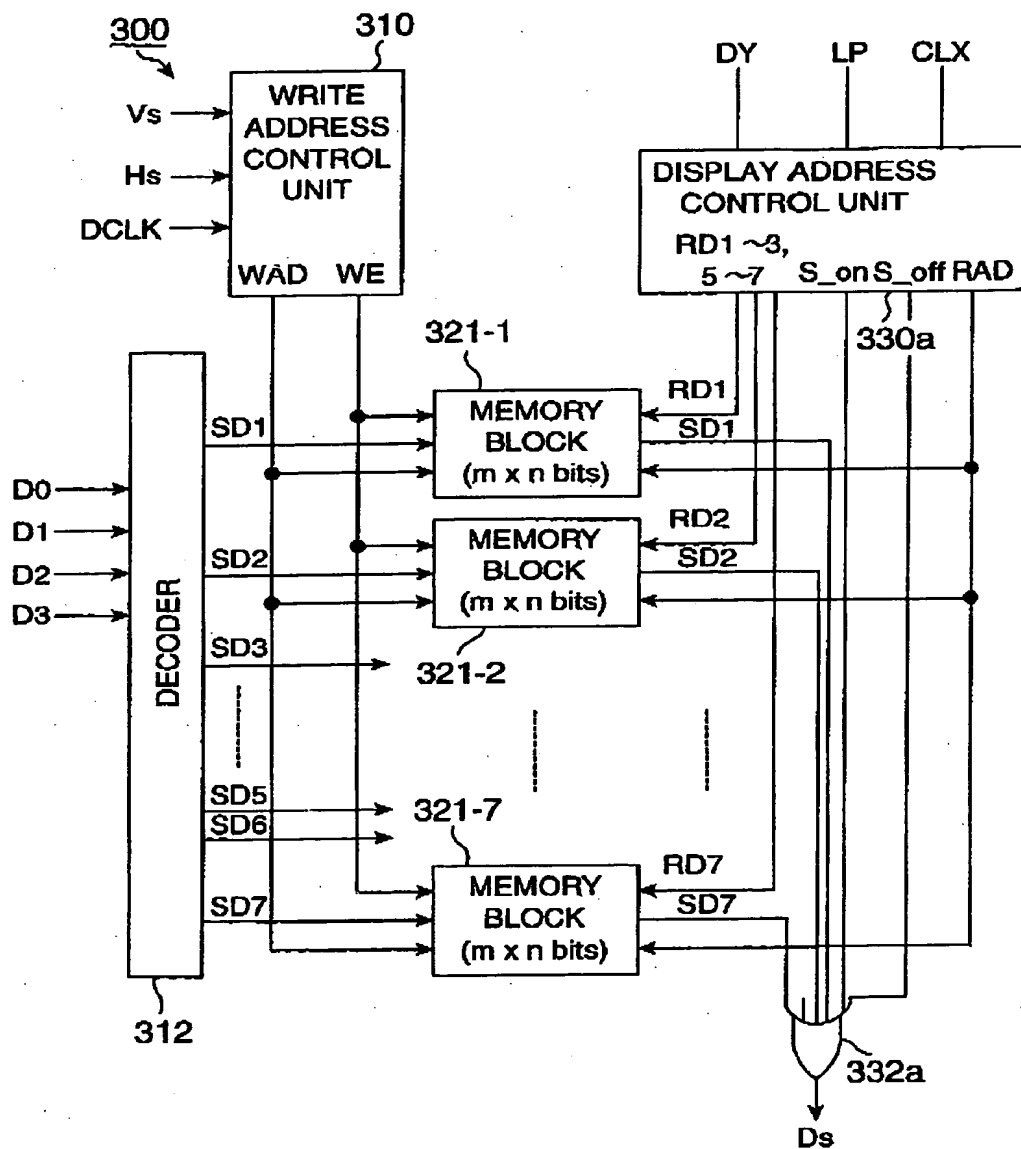


FIG.17





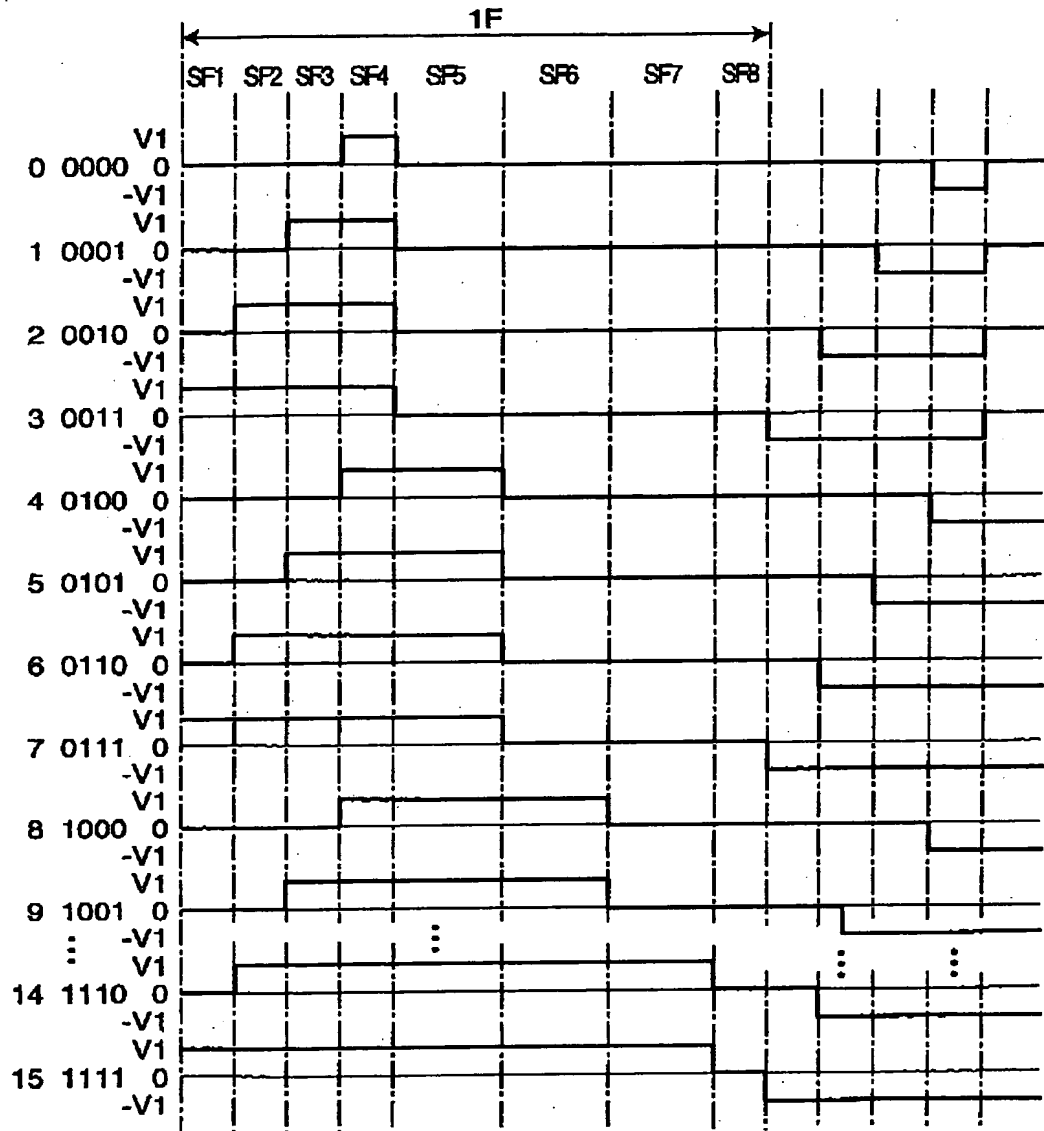


FIG. 19

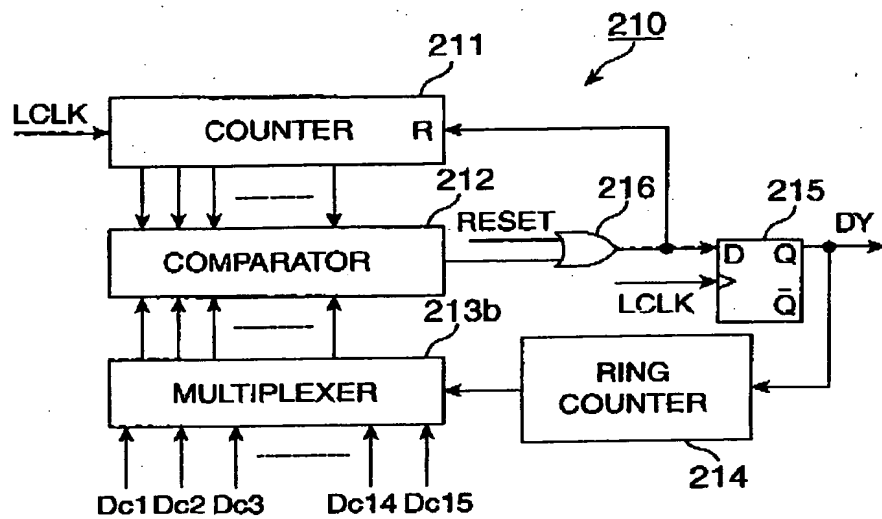


FIG. 20

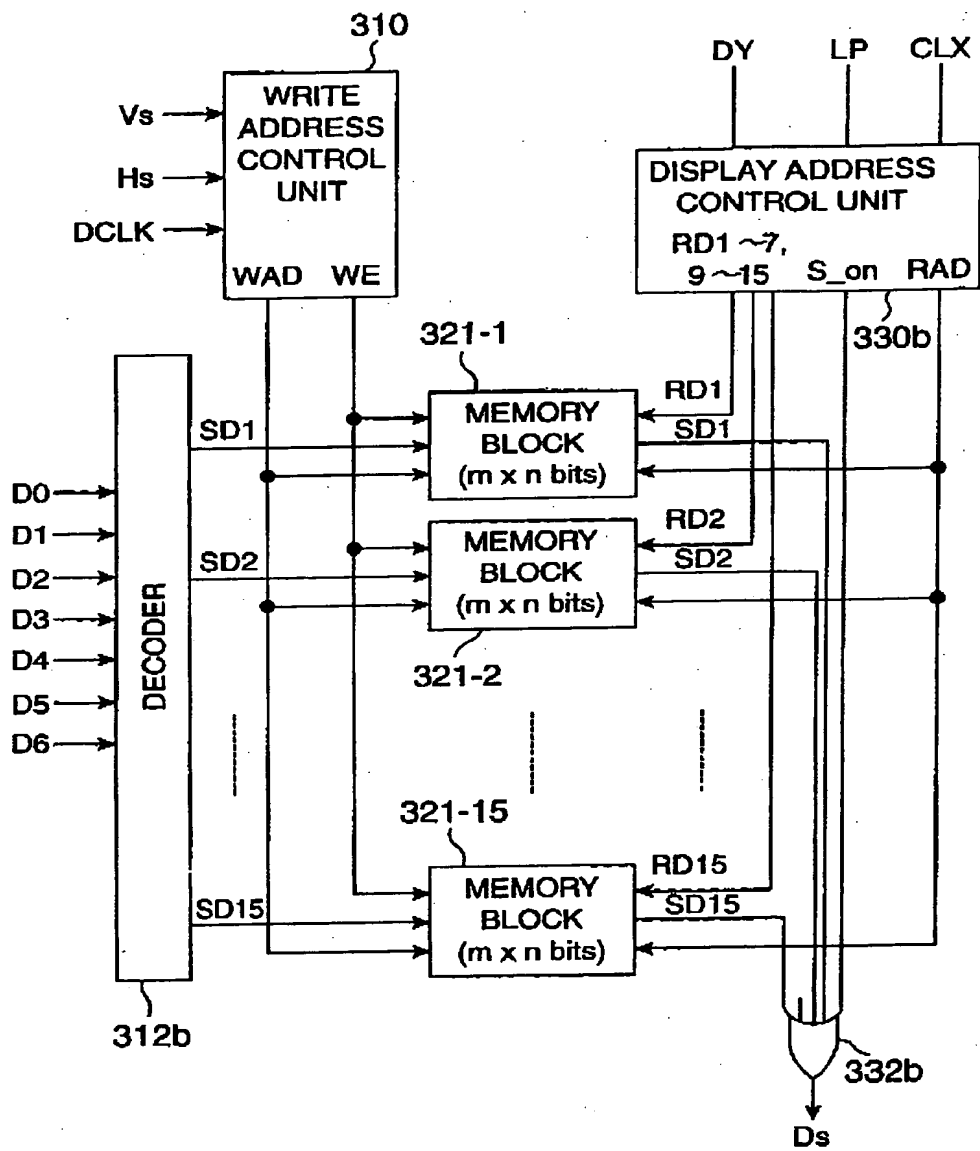


FIG. 21

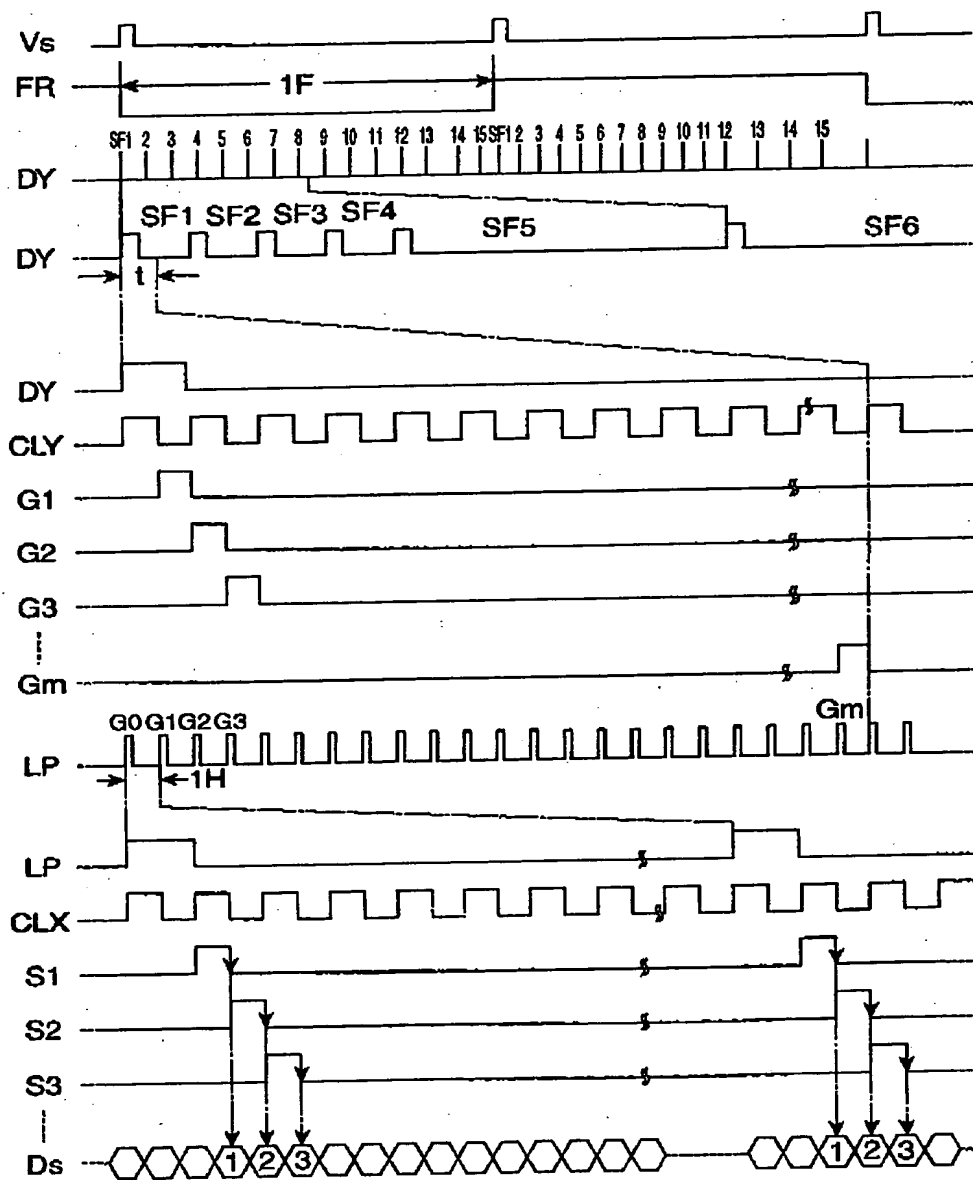


FIG. 22

10086543.030402

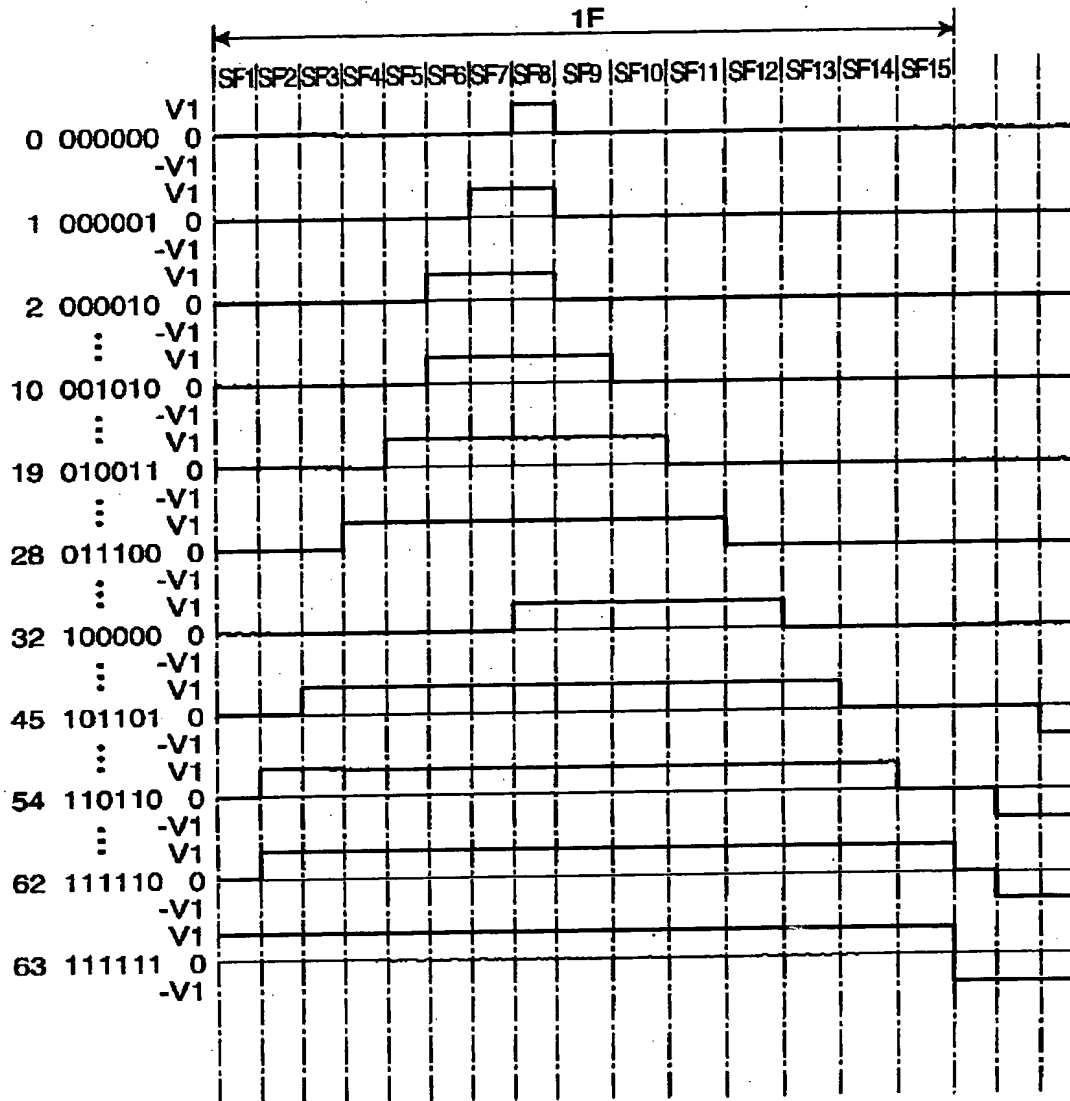


FIG. 23

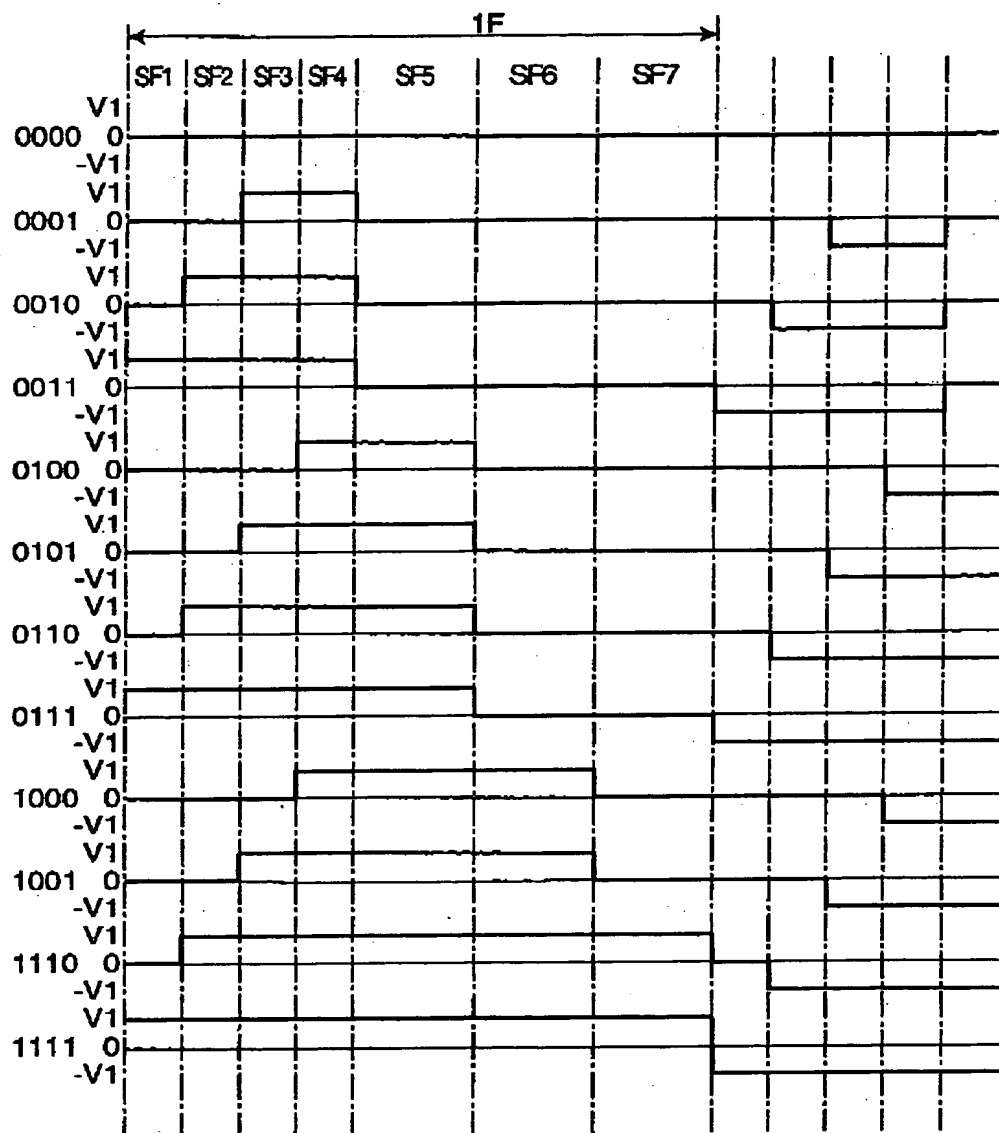


FIG. 24

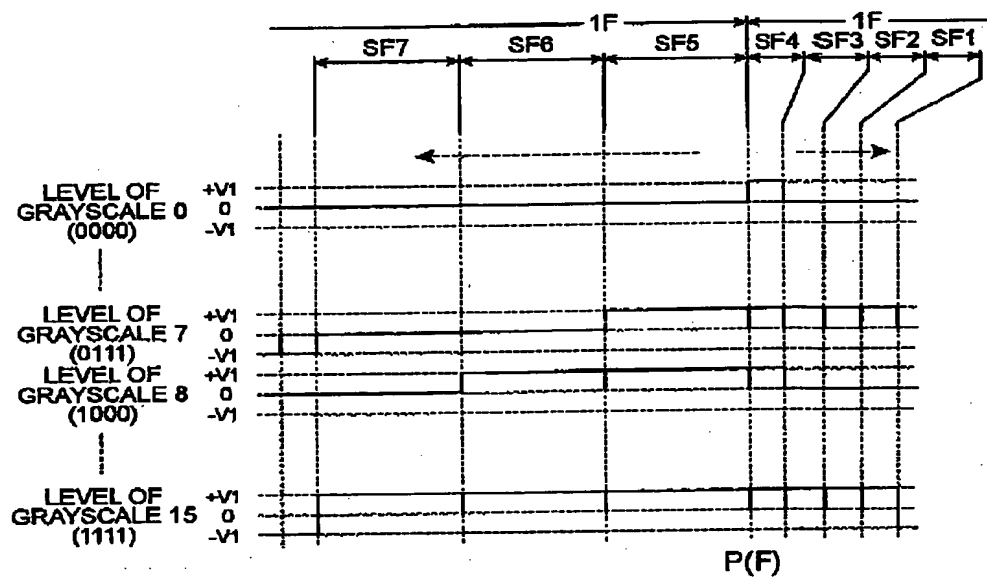


FIG. 25

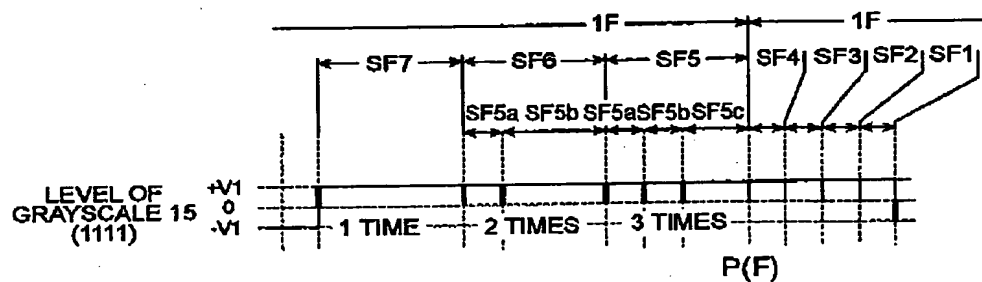


FIG. 26

BLOCK DIAGRAM OF DATA CONVERTING  
CIRCUIT FOR 64-LEVEL GRAYSCALE (3FRC)

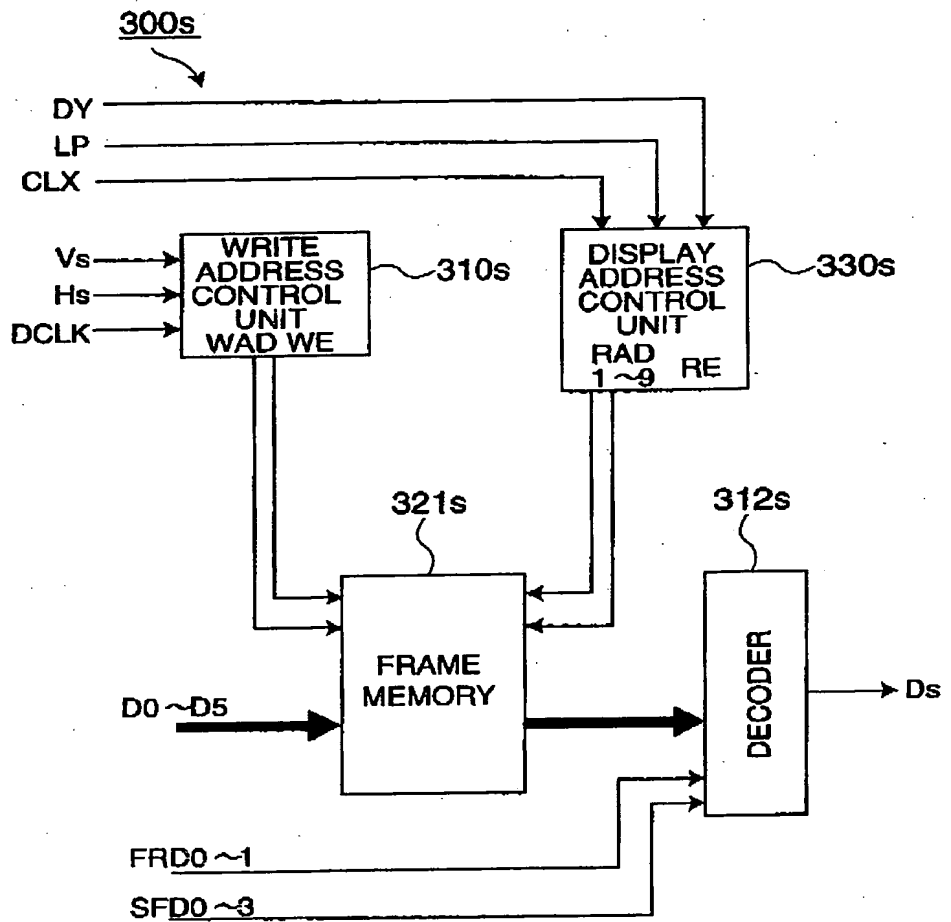


FIG. 27



DATA TRUTH TABLE FOR 64-LEVEL GRAYSCALE (3FRC)

GRAYSCALE DATA	FRD	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8	SF9	
000000	00	0	0	0	0	0	1	0	0	0	FR1
000000	01	0	0	0	0	0	1	0	0	0	FR2
000000	10	0	0	0	0	0	1	0	0	0	FR3
000001	00	0	0	0	0	1	1	0	0	0	FR1
000001	01	0	0	0	0	0	1	0	0	0	FR2
000001	10	0	0	0	0	0	1	0	0	0	FR3
000010	00	0	0	0	0	1	1	0	0	0	FR1
000010	01	0	0	0	0	1	1	0	0	0	FR2
000010	10	0	0	0	0	0	1	0	0	0	FR3
000011	00	0	0	0	0	1	1	0	0	0	FR1
000011	01	0	0	0	0	1	1	0	0	0	FR2
000011	10	0	0	0	0	1	1	0	0	0	FR3
000100	00	0	0	0	1	1	1	0	0	0	FR1
000100	01	0	0	0	0	1	1	0	0	0	FR2
000100	10	0	0	0	0	1	1	0	0	0	FR3
000101	00	0	0	0	1	1	1	0	0	0	FR1
000101	01	0	0	0	1	1	1	0	0	0	FR2
000101	10	0	0	0	0	1	1	0	0	0	FR3
111011	00	0	1	1	1	1	1	1	1	1	FR1
111011	01	0	1	1	1	1	1	1	1	1	FR2
111011	10	0	0	1	1	1	1	1	1	1	FR3
111100	00	0	1	1	1	1	1	1	1	1	FR1
111100	01	0	1	1	1	1	1	1	1	1	FR2
111100	10	0	1	1	1	1	1	1	1	1	FR3
111101	00	1	1	1	1	1	1	1	1	1	FR1
111101	01	0	1	1	1	1	1	1	1	1	FR2
111101	10	0	1	1	1	1	1	1	1	1	FR3
111110	00	1	1	1	1	1	1	1	1	1	FR1
111110	01	1	1	1	1	1	1	1	1	1	FR2
111110	10	0	1	1	1	1	1	1	1	1	FR3
111111	00	1	1	1	1	1	1	1	1	1	FR1
111111	01	1	1	1	1	1	1	1	1	1	FR2
111111	10	1	1	1	1	1	1	1	1	1	FR3

FIG. 28

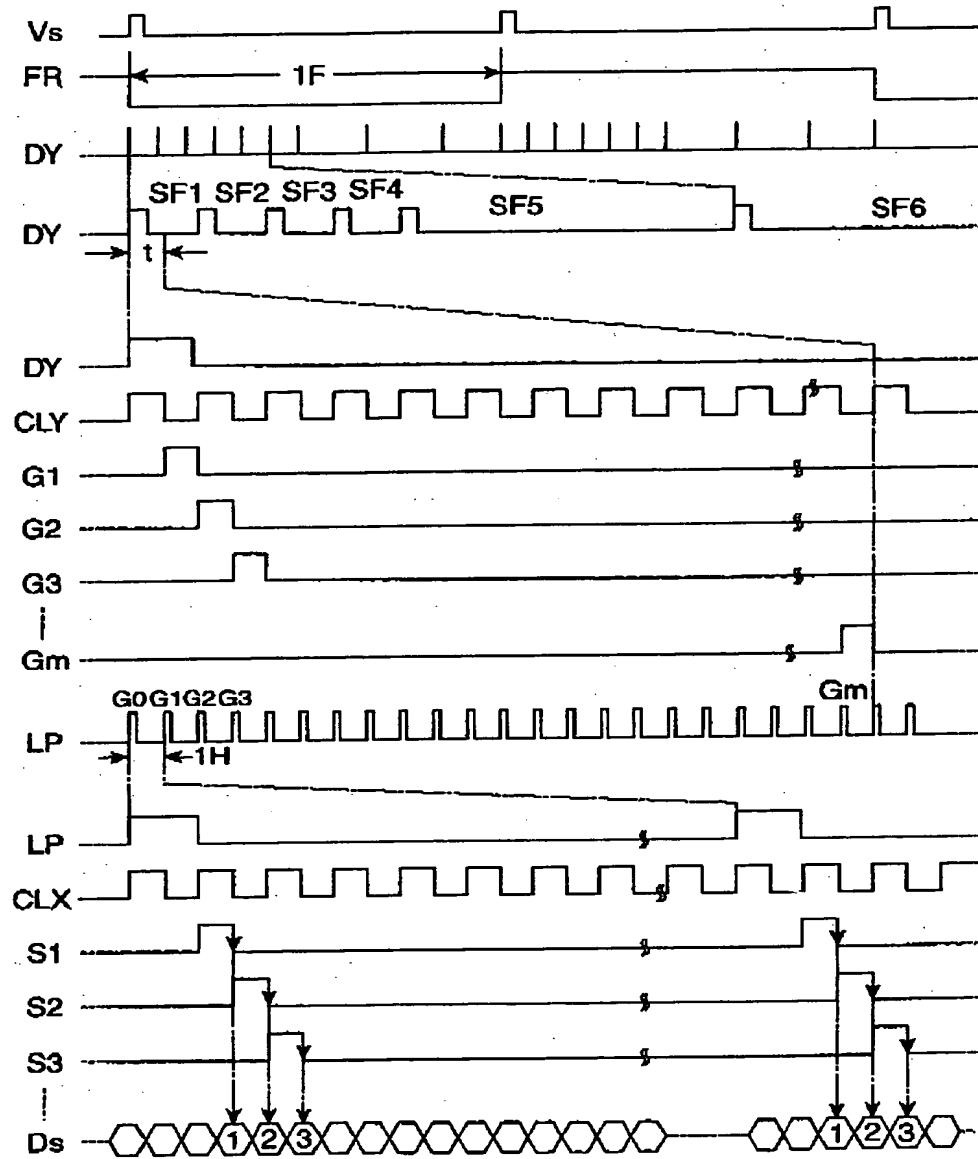


FIG. 29

204030" 8459800T 10086543 .030402

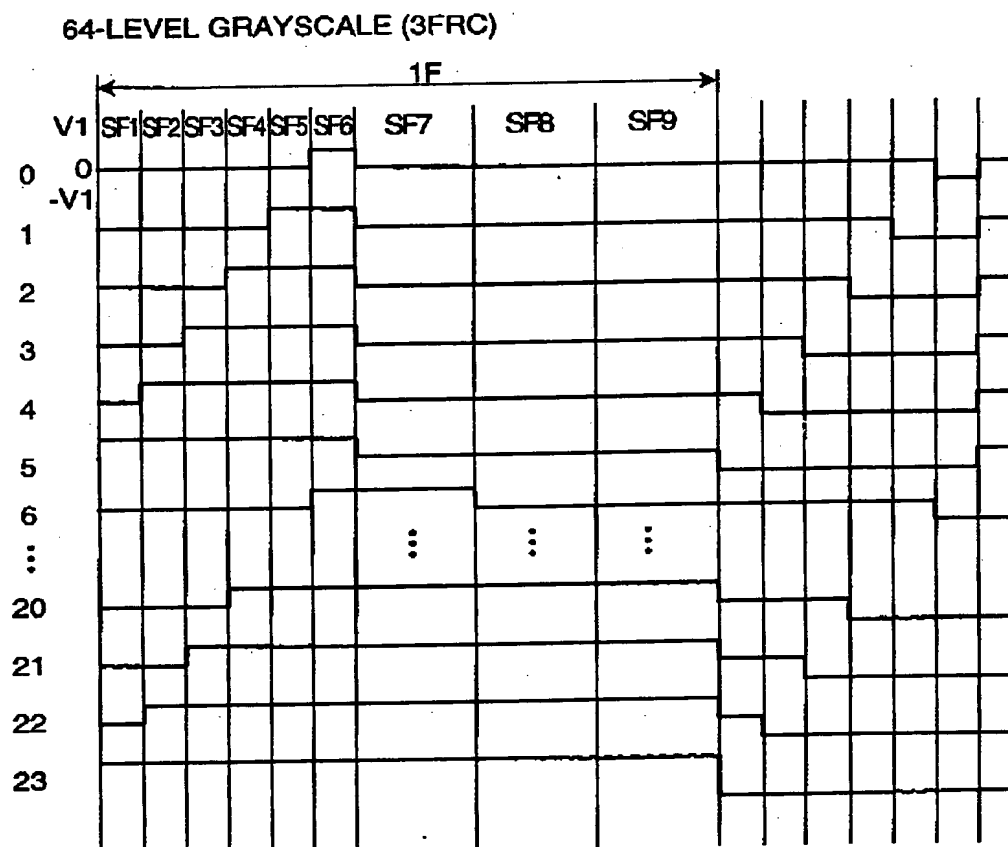


FIG. 30

64-LEVEL GRAYSCALE (3FRC)

DATA	FR1	FR2	FR3
000000	0	0	0
000001	1	0	0
000010	1	1	0
000011	1	1	1
000100	2	1	1
000101	2	2	1
000110	2	2	2
000111	3	2	2
010000	6	6	6
010001	7	6	6
010010	7	7	6
010011	7	7	7
100000	12	12	12
100001	13	12	12
100010	13	13	12
100011	13	13	13
111100	22	22	22
111101	23	22	22
111110	23	23	22
111111	23	23	23

FIG. 31

2040E0" E459800T

BLOCK DIAGRAM OF DATA CONVERTING  
CIRCUIT FOR 64-LEVEL GRAYSCALE (2FRC)

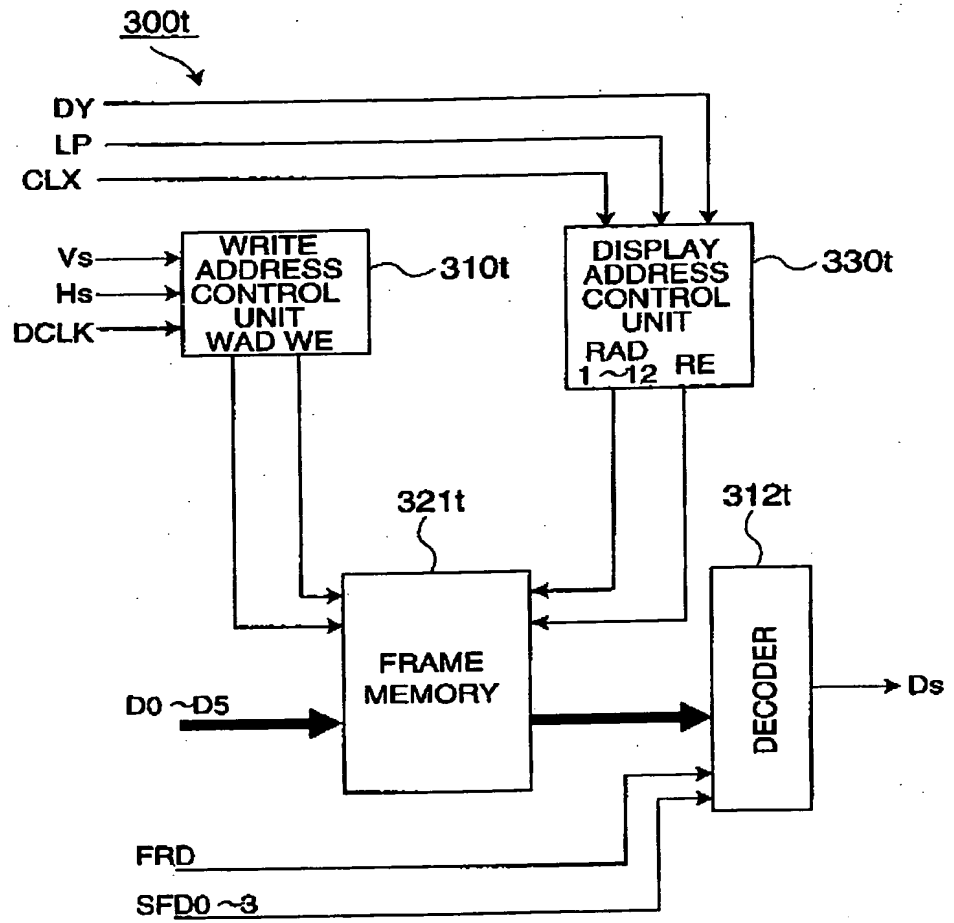


FIG. 32

204080" CHS9800T  
10086543.030402

64-LEVEL GRAYSCALE (2FRC)

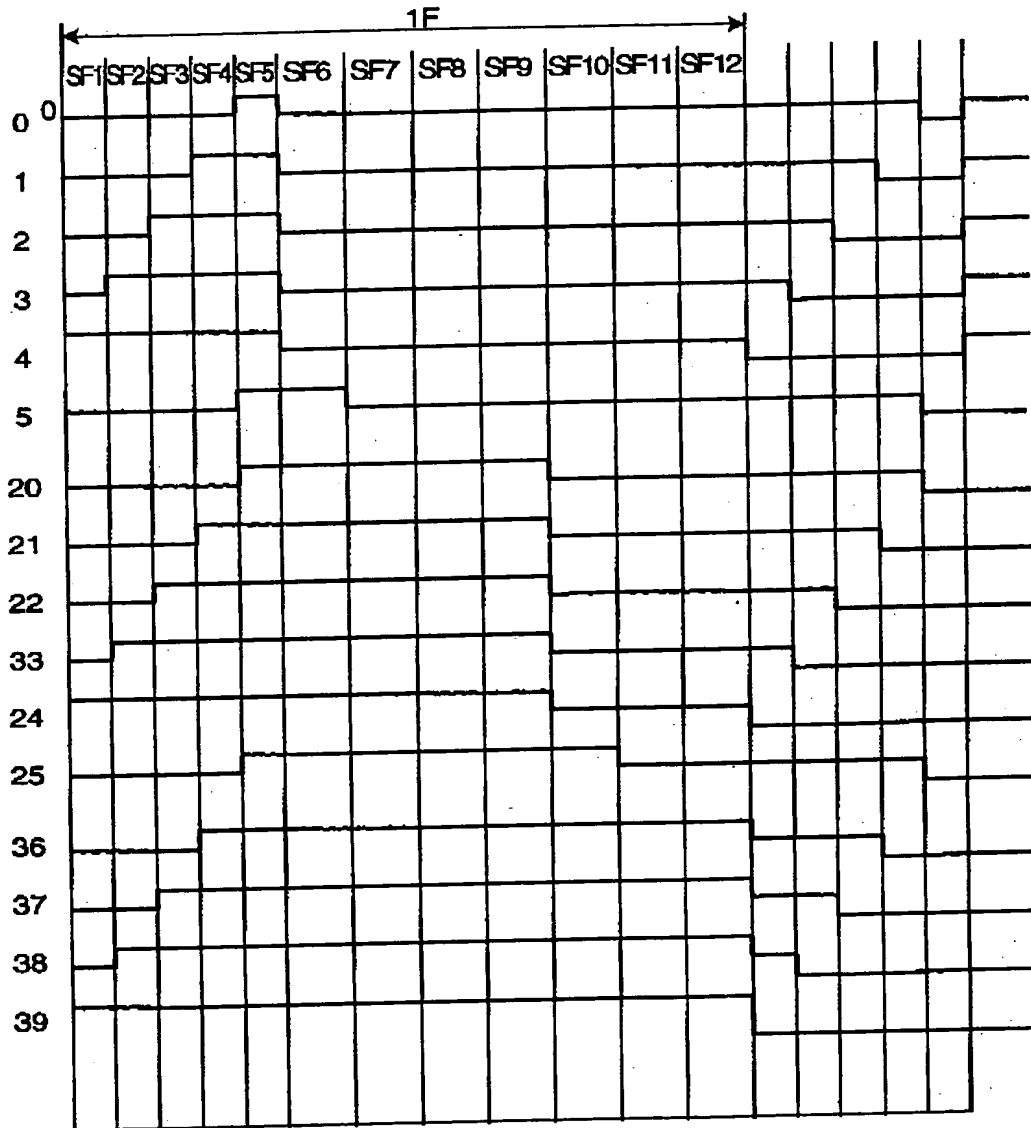


FIG. 33

64-LEVEL GRAYSCALE (2FRC)

DATA	FR1	FR2
000000	1	0
000001	1	1
000010	2	1
000011	2	2
000100	3	2
000101	3	3
000110	4	3
000111	4	4
001000	6	5
001001	6	6
010000	11	10
010001	11	11
010010	12	11
010011	12	12
100000	21	20
100001	21	21
100010	22	21
100011	22	22
111100	38	37
111101	38	38
111110	39	38
111111	39	39

FIG. 34

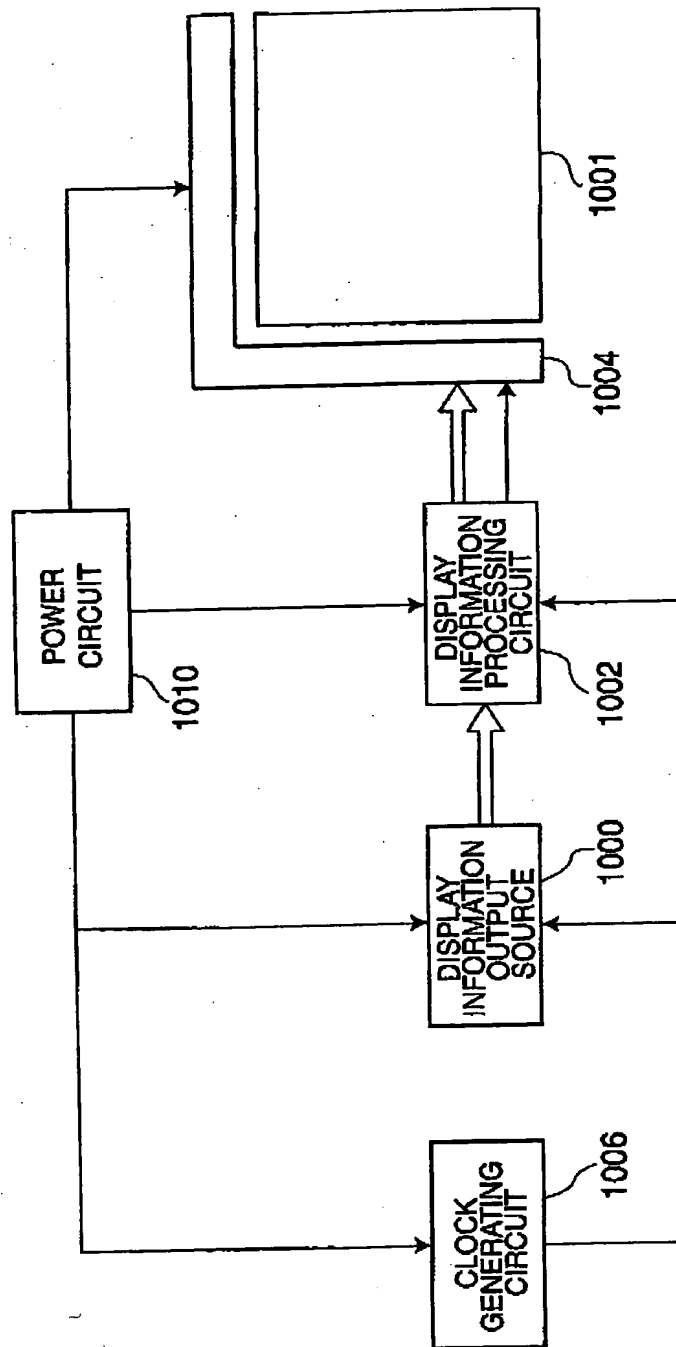


FIG. 35



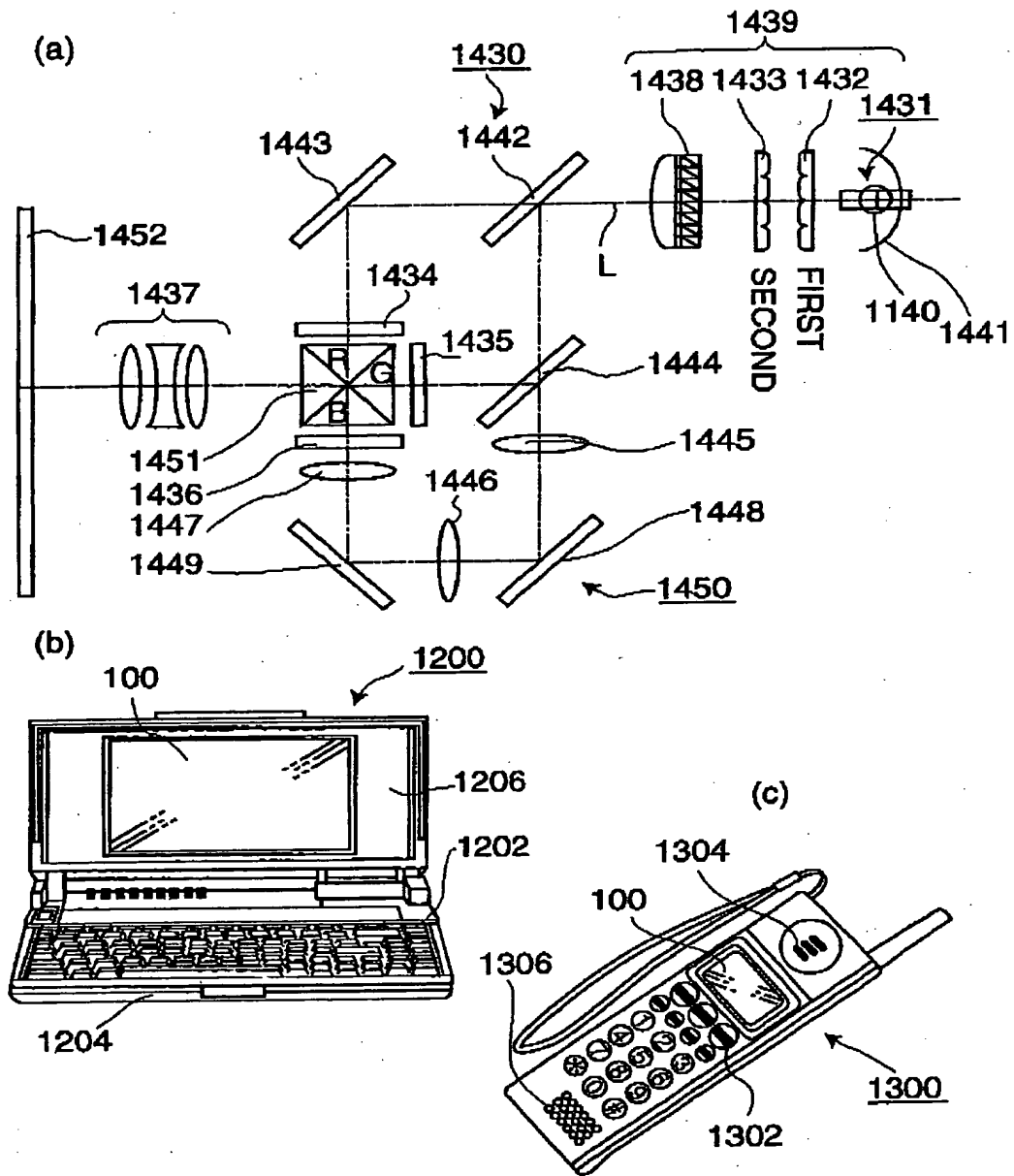


FIG. 36